

Abstract

THE COMPARATION OF SOLID AND UNSTABLE SURFACE EXERCISE ON 13YEARS OLD ICE-HOCKEY PLAYERS BY MYOTEST

Objectives: Compare the effect of the course and exercises by using unstable surfaces with and without field accelerometer (Myotest).

Methods: The exercise of a similar movement pattern was performed qualitative and quantitative comparison of the stress field parameters using the accelerometer. Quantitative stress parameters were evaluated for individual movements as mean values from a larger number of repetitions for intra-individual assessments. For comparison exercises were probands adapted from ongoing training process.

Results: The results obtained during by testing shows that the measured power and performance weren't always exactly according to the hypotheses.

The hypotheses were in some cases completely confirmed (eg VR lunge at the knees in the value of the force on the mat 994.4 N and Bosu 1154 N. The difference is 159,6 N, which is about 16%), in others completely rejected (eg KŠ kneeled in lunge was power value on the mat 730 W and on the Bosu 1172 W. Difference is 442 W, which is about 60%). Occasionally a situation where it was not possible hypothesis neither confirm nor reject (eg H2: the squat were measured performance values on the mat for the three probands negative (JP -70 W, VR -72,2 W, JS -12 W), at other two then positive (AB 133,4 W, KS 168,6 W).

Differences in performance on a stable platform and on the Bosu corresponded with technical maturity in handling individual player movements.

Keywords: Balance exercises, Bosu, Myotest, Ice Hockey.